Allen Joseph Jacobs

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EXPERIENCE

2001-present: Vice President of Engineering for Reno A & E, Reno, Nevada. Responsibilities: Oversee long-range development goals and prioritization of projects for the company's Engineering Department. Software and Firmware development for traffic signal related products. Accomplishments: Lead the engineering team during the development of the company's first Malfunction Management Unit (MMU) for NEMA based traffic control systems and a Conflict Monitor Unit (CMU) for Caltrans based traffic control systems.

2000-2001: Engineering Manager for Reno A & E, Reno, Nevada. Responsibilities: Manage the day-to-day operations of a seven person electronic engineering staff. Software and Firmware development for traffic signal related products. Accomplishments: Develop and implement policies that were key in getting ISO 9001 certification for the company. Developed the boilerplate for and wrote all of the user's manuals for the company's traffic signal products.

1999-2000: Senior Engineer for Reno A & E, Reno, Nevada. Responsibilities: software and firmware development and hardware design reviews for a company that designs and builds traffic signal related products. I wrote firmware, all in assembly, for embedded real time applications using Microchip 16, 17, and 18 series microcontrollers and 80186 microprocessors. I was the only Windows programmer on staff and wrote all applications developed by the company for Windows 95, 98, NT, 2000, and XP in Visual Basic.

1994-1999: Electronics Division Supervisor for the Electronics Division, City of Bremerton, Bremerton, Washington. Responsibilities: Manage the day-to-day operations of a seven person maintenance facility. The Electronics Division is responsible for maintenance of traffic signal and street lighting systems throughout Kitsap County and Mason County, installation and maintenance of the City's six PBX telephone systems supporting over 800 users, maintenance of all instrumentation and control systems at the City's wastewater treatment facility and for the City's Water Department, maintenance and installation of building electrical systems, and maintenance and installation of public safety equipment (2-way radios, light bars, sirens, cellular phones, police radars, etc.) for the City of Bremerton and other local government agencies. Accomplishments: Wrote the City's street lighting standards, Wrote the database application used by the City to track customer service for public complaints and requests.

1980-1994: Electronics Technician for the Electronics Division, City of Bremerton, Bremerton, Washington. Responsibilities: Maintenance and coordination of over 70 traffic signals, installation and maintenance of a PBX supporting over 500 users, maintenance of all instrumentation and control systems at the City's wastewater treatment facility, and maintenance of microcomputer equipment and peripherals. Accomplishments: Designed and installed the oldest and largest working transit preemption system in the nation, for use in the City of Bremerton and Kitsap County by Kitsap Transit. Designed and built three computerized video road logging vehicles. Designed and installed a computerized control system for Kitsap County's road striper. Oversaw the installation of all traffic signal coordination equipment in the City of Bremerton and created all coordination plans used in the city. Researched and wrote bid specifications for the City of Bremerton's Voice Mail, Police Dictation system, various PBX upgrades, and Traffic Signal cabinets. Wrote the program used by the City to track maintenance history and perform time and materials billing.

1980-2003: Owner of AJ Enterprises, a part time computer consulting, programming, and sales business. Customers include: Kitsap County Central Communications (911) for Enhanced 911 Call Tracking and call answering statistics used to determine staffing levels. Clallam – Jefferson Community Action Council for writing a reporting system that allowed agency personnel access to up to date accounting information without having access to the accounting system itself and telephone system maintenance. Kitsap Community Action Program for installing and administering their first network (Novell) and customizations to their accounting software. Kitsap County Public Employees Credit Union for installing their network (Windows for Workgroups) and telephone system maintenance. US Postal Service for Windows based software used to train and evaluate mail clerks on the sorting of mail. Teamsters Local 589 for installing their first network (Windows for Workgroups) and providing advanced Excel spreadsheet support for their accounting personnel. Kitsap Peninsula Vocational Skills Center for developing a program to track student attendance and grades. American Federation of Government Employees for database and spreadsheet development for their accounting personnel. I have

designed, installed, and acted as network administrator on several Microsoft Windows for Workgroups, Windows NT, Windows 2000 and Novell networks. Wrote three commercial software packages for Apple and IBM computers. One for floppy disk drive maintenance & data recovery, one for tracking and analyzing incoming 911 calls and answering time at enhanced 911 centers, and one for logging and analyzing emergency medical service calls for fire departments.

1982-83: Electronics Instructor at Washington Technical Institute, Bremerton, Washington. Responsibilities: Teach solid state theory at a technical school to adult students.

1980: Electronics Technician for Esterline Electronics, Bangor, Washington. Responsibilities: Install and troubleshoot a base wide monitoring and control system. All functions, at the Bangor Naval Submarine Base, from power distribution to security to environmental controls were monitored and controlled by this system. Accomplishments: Hired by a contractor that was 2 years behind schedule when I started. In nine months I had not only got the job back on schedule but actually worked myself out of a job by completing the contract.

TRAINING AND CERTIFICATIONS

2002: Attended a Professional Development Seminar, Managing Projects and People
1998: Recertified in Flagging and Traffic Control for the State of Washington.
1995: Attended a Professional Development Seminar by Fred Pryor, How to Prioritize Your Work.
1995: Completed a course on Confined Space Entry.
1994: Recertified in Adult CPR.
1993: Recertified in Standard First Aid.
1992: Attained a Class A Washington State Commercial Drivers license with air brake endorsement.
1991: Completed a two-week course in Installation and Maintenance of Meridian Mail for Northern Telecom PBXs.
1989: Completed a one-week class on Traconet traffic control systems implementation and programming.
1987: Completed a one-week course in Familiarization with the Northern Telecom SL-1 PBX software.
1987: Completed a two-week course in Data Base Management for the Northern Telecom SL-1 PBX software.
1987: Completed a one-week course in Installation of the Northern Telecom SL-1 S, MS, and ST PBX equipment.
1987: Completed a two-week course in Maintenance of the Northern Telecom SL-1 S, MS, and ST PBX equipment.
1986: Attained Traffic Signal Technician Level II certification from the International Municipal Signal Association.
1986: Attained Traffic Signal Technician Level I certification from the International Municipal Signal Association.
1986: Attended a Professional Development Seminar, Effective Business Communications.
1984: Attended a Professional Development Seminar, Communication: Process, Problems, & People.

EDUCATION

1979-1980: Currently 10 credits short of graduating with an Associates in Technical Arts degree in industrial electronics from Olympic College, Bremerton, Washington, with a grade point average of 3.83. Hired by the City of Bremerton prior to completing my degree.

1979: Graduated top of the Electronics class from the Kitsap Peninsula Vocational Skills Center, Bremerton, Washington.

1979: Honor graduate from North Kitsap Sr. High School, Poulsbo Washington. Maintained an overall G.P.A of 3.5 with a 4.0 G.P.A. in electronics and math classes.

SKILLS

Very proficient in many macro assemblers, interpreted BASICs, compiled BASICs, Microsoft Visual Basic, Visual Basic for Applications (VBA), and Microsoft Access. I have written machine language and BASIC programs for PCs, APPLE IIs, Burroughs B25s, and many embedded systems. I consider myself a professional Visual Basic programmer and Access database developer. Extremely experienced in troubleshooting and repairing PCs. Very proficient in component level troubleshooting of digital and analog systems. Skilled in customer relations, writing bid specifications, preparing bids, budget preparation, and writing user manuals. I am an expert in the use of Word, Excel, Access, Outlook, Visio, Project, PowerPoint, and Visual Basic. I have programmed in assembly for the following processors: Intel 8080, Intel & AMD x86 family, Philips ARM 7, Rockwell 6502, Motorola 6800, Microchip 12 Series, Microchip 16 Series, Microchip 17 Series, Microchip 18 Series, Texas Instruments TMS320LF2406 DSP, and the Atmel AVR family.

EXTRACURRICULAR

Member of the Institute of Traffic Engineers (ITE) TENC 103-02 technical committee focusing on the potential use of existing loops at signalized intersections for traffic counts from 2005 to present.

Member of the National Transportation Communications for ITS Protocol (NTCIP) Traffic Sensor Systems (TSS) Workgroup from 2002 to present. This committee is responsible for developing a national communications protocol standard for transferring information between traffic sensing systems and traffic control equipment.

Member of the NEMA Advanced Traffic Controller Committee (ATC) – Cabinet Working Group in 2002. This working group is responsible for defining how all Advanced Traffic Controller equipment will physically interface with each other and all mechanical specifications for the ATC cabinet assembly.

Member of the Citizens Traffic Advisory Committee for the City of Reno, Nevada in 1999 to 2001. This committee is responsible for making recommendations to the Reno City Council on the impacts of building projects proposed to the City that may affect local traffic.

Member of the NEMA Advanced Traffic Controller Committee (ATC) – Detection Working Group from 2000 to 2002. This working group is responsible for defining how Advanced Traffic Controller equipment will interface with traffic detection equipment.

Member of the Transit Standards Consortium (TSC) – Transit Signal Priority Working Group in 1998. This working group is responsible for defining what is Transit Signal Priority and how it will function for the National Transportation Communication for ITS Protocol (NTCIP) standard.

Member of the Transit Communications Interface Protocols (TCIP) – Traffic Management Working Group in 1997. This working group was responsible for defining the data dictionary and messages to be used for transit traffic management centers communicating using the National Transportation Communication for ITS Protocol (NTCIP) standard.

Voting Member of National Electrical Manufacturers Association (NEMA) 2000 to 2003.

Member of the International Municipal Signal Association (IMSA) since 1985.

Executive board member of the Bremerton Mainstreet Association in 1998 and 1999.

Executive committee member for the Bremerton Blackberry Festival from 1997 to 1999.

Guest speaker at the June 1997 IMSA Northwest Section Meeting. Topic: Bremerton's Experience with Transit Signal Priority Systems.

Guest speaker at the 1995 IMSA Northwest Section Conference. Topic: Transit Priority Preemption Systems.

Chairman of the Traconet Users Group Northwest since 1990 when it was founded until 1999. Editor of the quarterly newsletter.

Member of the Course Advisory Board for the Electronics course at the Kitsap Peninsula Vocational Skills Center from 1982 to 1990.

Member of the Course Advisory Board for the Computer Maintenance course at the Kitsap Peninsula Vocational Skills Center from 1984 to 1992.

Received special recognition from the City of Bremerton, twice for cost savings realized by the City and once for on the job safety.

Guest speaker at the 1982 Associated Public-Safety Communications Officers (APCO) Northwest Regional Conference. Topic: Use of Personal Computers in Local Governments.

Guest speaker at the 1992 IMSA Northwest Regional, Eastern Washington, and Western Washington Conferences. Topic: Use of Personal Computers in Traffic Signal Maintenance.

REFERENCES

Available Upon Request